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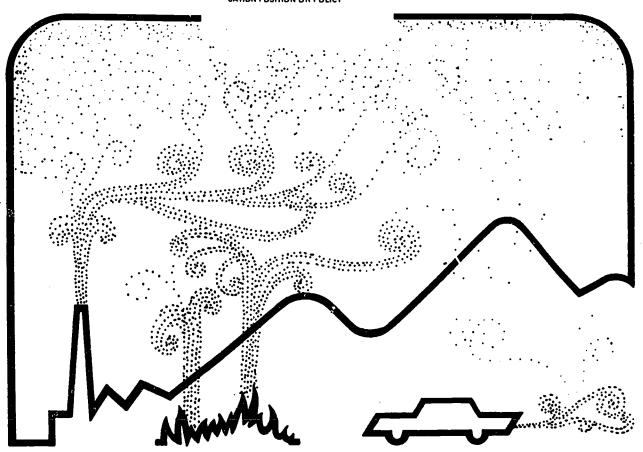
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#### ABSTRACT

Nine articles, related to the preservation of the natural quality of the air, and to prevention, elimination and control of atmospheric pollution in the Commonwealth of Puerto Rico, are contained in this document. These articles were written and enacted by the Environmental Quality Board in accordance with Law No. 9, approved June 18, 1970 - Public Policy Environmental Act. Article headings appear as follows: Definitions; General Provisions; Administration; Open Burning; Control of Particulate Emissions; Control of Sulfur Compound Emissions; Control of Organic Compounds Emissions; Odors in the Atmosphere; and Additional Provisions. (LK)

COMMONWEALTH OF PUERTO RICO / OFFICE OF THE GOVERNOR Environmental Quality Board

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# A REGULATION FOR THE CONTROL OF ATMOSPHERIC POLLUTION **AMENDED VERSION**



## **COMMONWEALTH OF PUERTO RICO**

OFFICE OF THE GOVERNOR

**ENVIRONMENTAL QUALITY BOARD** 

Environmental Quality Board Regulation for the Control of Atmospheric Pollution

# BE IT ENACTED BY THE ENVIRONMENTAL QUALITY BOARD:

TO PRESERVE THE NATURAL QUALITY OF THE AIR, AND TO PREVENT, ELIMINATE AND CONTROL ATMOSPHERIC POLLUTION; TO ESTABLISH STANDARDS AND REQUIREMENTS FOR THE PREVENTION, ELIMINATION, AND CONTROL OF ATMOSPHERIC POLLUTION, IN ACCORDANCE WITH LAW NO. 9, APPROVED ON JUNE 18, 1970 — PUBLIC POLICY ENVIRONMENTAL ACT.



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#### **ARTICLE 1 - DEFINITIONS**

Air pollutant —Dust, fumes, mist, smoke, other particulate matter, vapor, gas odorous substances, or any combination thereof, but not including uncombined water vapor.

Air pollution —The presence in the outdoor atmosphere of one or more air pollutants in such quantities and duration as is or could be injurious to human health or welfare, animal or plant life, or property, or which interferes with the enjoyment of life or property.

Applicable rules and regulations -See section 2.1

Atmospheric pollution control equipment —Any process, equipment, device, and all appurtenances thereto, used for eliminating, reducing, or controling the emission of any air pollutant.

Board - The Environmental Quality Board of the Commonwealth of Puerto Rico.

Burning or incineration —The complete or incomplete combustion of any material.

Clean air date —That date, fixed pursuant to the U.S. Clean Air Act, by which Puerto Rico is required to attain compliance with a national primary or secondary ambient air quality standard. If a source is subject to a postponement or extension granted by the U.S. Government pursuant to the Act, the clean air date for that source is the date on which such postponement or extension terminates. The Board may from time to time adopt resolutions setting forth the clean air date(s) as so fixed by the U.S. Government pursuant to the Act. In the absence of such a resolution, the clean air date is April 30, 1975; except that, with respect to any additional restriction resulting from a new or revised national ambient air quality standard that becomes effective after April 30, 1972, the clean air date is three years after the effective date of such new or revised standard.

Emmission —The act of releasing or discharging air pollutants into the ambient air from any source.

Existing source —Any stationary source other than a new or modified source.

Fuel burning equipment —Any surface, boiler, apparatus, stack, and all appurtenances thereto, used in the process of burning fuel for the primary purpose of producing heat or power by indirect heat transfer.

Fugitive dust —Solid airbone particulate matter emitted from any source other than through a stack.



Incinerator —Any equipment, apparatus, and all appurtenances thereof, used for the burning or incineration of garbage or other combustible waste.

Major source —Any existing source that emits or may emit more than 1,000 tons per year of SO<sub>2</sub> or of particulate matter, and any new or modified source that emits or may emit more than 300 tons per year of SO<sub>2</sub> or of particulate matter. For purposes of this definition, all air pollutants emitted from each parcel of land or place of business or other establishment shall be treated as coming from one source. Any modification of a source shall itself be considered a major source if it increases the emission of SO<sub>2</sub> or particulate matter by 300 tons per year or more.

Modification —Any physical change to or change in the method of operation of a stationary source which increases the amount of any air pollutant emitted by such source or which results in the emission of any air pollutant not previously emitted. Routine maintenance, repair, and replacement shall not be considered physical changes.

New or modified source —Any stationary source, the construction or modification of which is commenced after the effective date of this Regulation or of any relevant revision of applicable rules and regulations.

Opacity —A state which renders material partially or totally impervious to light or to the vision of an observer.

Open burning —Burning or incineration of material not confined in an enclosure designed for essentially complete combustion.

Particulate matter —Any material in solid or liquid form sufficiently subdivided into small particles as to be susceptible to dispersion and suspension or to be carried by currents of air or other gases, except water in its uncombined state.

Person —Any person, natural or juridical, or group of persons private or public, including agencies, government bodies, municipalities and public and quasi-public corporations.

Process source —A source from which emissions are, in whole or in part, the result of a manufacturing process that produces a chemical change in any of the materials in that process.

Refuse —All waste material, including (but not limited to) garbage, rubbish, incinerator residue, street sweepings, dead animals, and animal wastes.

Ringelmann chart —The chart published and described in U.S. Bureau of Mines Information Circular 8333 or any chart, recorder, indicator or device which the Board may approve as the equivalent of such chart.



Source -Any property, real or personal, which emits or may emit any air pollutant.

Stack -Any chimney, flue, conduit, or duct arranged to conduct emissions to the ambient air.



#### **ARTICLE 2 - GENERAL PROVISIONS**

- 2.1 Generic prohibitions
- 2.1.1 No person shall cause or permit air pollution as defined in article 1.
- 2.1.2 No person shall cause or permit the emission of any air pollutant in violation of applicable rules and regulations:
  - A. Such rules and regulations include:
    - 1. Emission limitations and all other requirements established by this Regulation or by other laws or regulations of the Commonwealth of Puerto Rico; and
    - 2. "Performance standards for new stationary sources," "National emission standards for hazardous air pollutants," and any other requirements established by the United States Government pursuant to the Clean Air Act as amended.
  - B. Moreover, such rules and regulations shall be deemed to prohibit any emission that, in the judgement of the Board, prevents or interferes with attainment or maintenance of applicable ambient air quality standards, including:
    - 1. Any such standards established by this Regulation or by other laws or regulations of the Commonwealth of Puerto Rico; and
    - 2. "National primary and secondary ambient air quality standards" established by the United States Government pursuant to the Clean Air Act as amended.
- 2.1.3 No person shall install or cause the installation or use of any device or fuel additive or any means which, without resulting in reduction in the total amount of air pollutant emitted, conceals or dilutes an emission of air pollutant which would otherwise violate applicable rules and regulations. This subsection 2.1.3 shall not prohibit the construction or enlargement of stacks; nor shall it prohibit the increasing of emission velocities; nor shall it prohibit the use of any fuel additive the use of which is required by any other law, regulation, standard, or limit established by any duly constituted governmental authority having jurisdiction.
- 2.2 Source monitoring, record keeping, reporting, sampling and testing methods
- 2.2.1 The Board may require the owner or operator of any source to install, use, and



maintain such monitoring equipment, sample such emissions, sample such ambient air quality, establish and maintain such records, and make such periodic reports as the Board shall prescribe. For each major source, moreover, the Board shall at minimum require the owner or operator, at his own expense, to (a) sample ambient air quality, and (b) either sample emissions from each stack or provide an equivalent determination acceptable to the Board.

- 2.2.2 Representatives of the Board, upon presentation of their credentials,
  - 1. Shall have right of entry to, upon, or through any premises in which a source is located or in which any records required to be maintained under this Regulation are located, and
  - 2. May at reasonable time have access to and copy any records, inspect any monitoring equipment or method to determine its accuracy, and sample any emissions or air quality which the owner or operator of such source is required under this Regulation to sample.
- 2.2.3 All tests shall be made and the results calculated in accordance with test procedures approved by the Board. All tests shall be made under the direction of an engineer or chemist licensed to practice the profession in Puerto Rico.
- 2.2.4 Ail records and reports required pursuant to this Regulation shall be submitted on forms prescribed by the Board and shall be submitted together with a sworn statement or affidavit of the corporate President, of a Vice President reporting directly to the President, or of the highest ranking corporate officer with offices in Puerto Rico; or of an equivalently responsible officer in the case of organizations other than corporations. Such sworn statement or affidavit shall attest to the truth, correctness, and completeness of such records and reports.
- 2.2.5 Emissions of particulate matter, sulfur oxides, and nitrogen oxides shall be expressed as follows: in pounds per hour or Kg. per hour and pounds per million B.t.u. or gm. per million gm. —cal. of heat input for fuel-burning equipment; in pounds per hour or kg. per hour and pounds per 100 pounds or gm. per kg. of refuse burned for incinerators; and in pounds per hour or kg. per hour or tons per year or tons per day or in terms of some other easily measured and meaningful process unit specified by the Board.
- 2.2.6 The Board may conduct tests of emissions of air poliutants from any source. Upon request of the Board, the person responsible for the source to be tested shall provide necessary ports in stacks or ducts and such other safe and proper sampling and testing facilities (but not including instruments and testing devices except when required pursuant to other provisions of this Regulation) as may be necessary for proper determination of the emissions of air pollutants.



#### 2.3 (Reserved)

- 2.4 Emission data availabe to public; presentation
- 2.4.1 All emission data obtained by the Board, including data reported pursuant to section 2.2 and data obtained in any other way, shall be available for public inspection and may also be made available to the public in any additional ways that the Board may deem appropriate.
- 2.4.2 All such emission data shall be presented in such a manner as to show the relationship between measured or estimated emissions and the emissions allowable under applicable rules and regulations.
- 2.5 Malfunction of equipment; reporting
- 2.5.1 In the case of shutdown of air pollution control equipment for necessary scheduled maintenance, the intent to shut down such equipment shall be reported to the Board at least 24 hours prior to the planned shutdown. Such prior notice shall include, but is not limited to the following:
  - A. Indentification of the specific facility to be taken out of service as well as its location and permit number.
  - B. The expected length of time that the air pollution control equipment will be out of service.
  - C. The nature and quantity of emission of air pollutants likely to be emitted during the shutdown period.
  - D. Measures such as the use of off-shift labor and equipment that will be taken to minimize the length of the shutdown period.
  - E. The reasons that it would be impossible or impractical to shut down the source operation during the maintenance period.
- 2.5.2 In the event that any emission source, air pollution control equipment, or related facility breaks down in such a manner as to cause the emission of air pollutants in violation of applicable rules and regulations, the person responsible for such equipment shall immediately notify the Board of such failure or breakdown and provide a statement giving all pertinent facts, including the estimated duration of the breakdown. The Board shall be notified when the condition causing the failure or breakdown has been corrected and the equipment is again in operation. Upon request of the Board, this notification shall be followed by a written report of the incident. This report shall include



specific data concerning the affected equipment, date and hour of the occurence, causes of the malfunction, and corrective measures taken.

#### 2.6 Air pollution emergencies

This regulation is designed to prevent the excessive buildup of air pollutants during air pollution episodes, thereby preventing the occurrence of an emergency due to the effects of these pollutants on the health of persons.

- 2.6.1 Episode criteria. The Board shall publicly announce the existence of an air pollution alert, air pollution warning, or air pollution emergency whenever the Board determines that the accumulation of air pollutants in any place is attaining or has attained levels which could, if such levels are sustained or exceeded, lead to a substantial threat to the health of persons. In making this determination with respect to SO<sub>2</sub> and particulate matter, the Board will be guided by the following:
  - A "Air Pollution Forecast". An internal watch by the staff of the Board shall be actuated by a National Weather Service advisory that Atmospheric Stagnation Advisory is in effect or the equivalent local forecast of stagnant atmospheric conditions.
  - B. "Alert". The Alert level is that concentration of pollutants at which first stage control actions is to begin. An Alert will be declared when any one of the following levels is reached at any monitoring site:
    - $-SO_2$  -800 ug/m<sup>3</sup> (0.28 p.p.m.), 24-hour average.
    - -Particulate -3.0 COHs or 375 ug/m<sup>3</sup> 24-hour average.
    - -SO<sub>2</sub> and particulate combined -product of SO<sub>2</sub> p.p.m. 24-hour average, and COHs equal to 0.2 or product of SO<sub>2</sub> ug/m<sup>3</sup> 24-hour average, and particulate ug/m<sup>3</sup> 24-hour average equal to 65 X 10<sup>3</sup>

and meteorological conditions are such that pollutant concentrations can be expected to remain at the above levels for 12 or more hours or increase unless control actions are taken.

- C. "Warning". The warning level indicates that air quality is continuing to degrade and that additional control actions are necessary. A warning will be declared when any one of the following levels is reached at any monitoring site:
  - SO<sub>2</sub> -1600 ug/m<sup>3</sup> (0.56 p.p.m.), 24-hour average.

Particulate -5.0 COHs or 625 ug/m<sup>3</sup> 24-hour average.



 $-SO_2$  and particulate combined -product of  $SO_2$  p.p.m., 24-hour average and COHs equal to 0.8, or product of  $SO_2$  ug/m³ 24-hour average and particulate ug/m³, 24-hour average equal to 261  $\times$  10³

and meteorological conditions are such that pollutant concentrations can be expected to remain at the above levels for 12 or more hours or increase unless control actions are taken.

- D. "Emergency". The emergency level indicates that air quality is continuing to degrade to a level that should never be reached and that the most stringent control actions are necessary. An emergency will be declared when any one of the following levels is reached at any monitoring site:
  - $-SO_2 2100 \text{ ug/m}^3$  (0.73 p.p.m.), 24-hour average,
  - -Particulate −7.0 COHs or 875 ug/m³, 24-hour average.
  - $-SO_2$  and particulate combined -product of  $SO_2$  p.p.m., 24-hour average and COHs equal to 1.2, or product of  $SO_2$  ug/m³, 24-hour average and particulate ug/m³, 24-hour average equal to 393  $\times$  10³

and meteorological conditions are such that this condition can be expected to continue for 12 or more hours.

E. "Termination": Once declared, any status reached by application of these criteria will remain in effect until the criteria for that level are no longer met. At such time, the next lower status will be assumed.

#### 2.6.2 Emission reductions

- A. When the Board declares an air pollution alert, warning, or emergency, and determines that such condition requires immediate action for the protection of the health of human beings, the Board will order persons causing or contributing to the atmospheric pollution to reduce their emissions in order to eliminate such condition, or to discontinue immediately the emission of pollutants.
- B. Orders issued by the Board pursuant to this article will not be subject to hearings prior to compliance.
- C. All persons responsible for a source shall, when requested in writing by the Board, have available an emergency plan which must be consistent with adequate industrial and safety practices, and which provides for the reduction or retention of the emissions in the plant during periods clas-



sified by the Board as air pollution alerts, warnings, or emergencies. These plans will include source of pollution, the reduction to be accomplished, and how such reduction will be accomplished. These plans will be available to any representative of the Board at any time.

## 2.7 Atmospheric pollution control equipment

All air pollution control equipment shall provide the necessary control for compliance with applicable rules and regulations. It shall be installed, maintained, and operated in a reasonable and satisfactory manner and in accordance with the specifications of the manufacturer and of the Board.

B. All material shall be removed at the intervals required for the maintenance of operational efficiency required of each air pollution control device. In case the collected material is to be disposed of, such disposal shall be in accordance with applicable rules and regulations. The removal, manipulation, transportation, storage or disposal will be done so as not to produce environmental degradation.



#### **ARTICLE 3 - ADMINISTRATION**

- 3.1 Permits to construct and operate emission sources
- 3.1.1 Permits to construct new or modified sources

No person shall construct or cause the construction of any new or modified source (as defined in article 1) without first obtaining a permit from the Board.

#### A. Applications

- 1. Each application for a permit to construct a new or modified source shall be signed by the owner or operator thereof. This signature shall constitute an agreement that the applicant will assume responsibility for the construction or operation of the source in accordance with applicable rules and regulations and will notify the Board in writing of the start-up of operation of such source.
- 2. Each application shall include detailed plans and specifications of the source, including (but not limited to) the location, height of the emission points, fuel used, process details, concentration and duration of emissions, and details about the atmospheric pollution control measures and equipment to be installed and constructed to comply with applicable rules and regulations.
- 3. Each application for a major source shall include certification by an engineer or chemist licensed to practice profession in Puerto Rico. Such certification shall indicate that the equipment or measures for the control of the proposed emissions are or are not, as the case may be, adequate to comply with applicable rules and regulations. The certification shall also include the results of any tests or other data which indicate that the emissions will or will not exceed the limits established by such rules and regulations.

#### B. Standards for granting permit to construct

No permit to construct a new or modified source shall be granted unless the applicant shows both of the following to the satisfaction of the Board:

- 1. That the source will operate without causing a violation of applicable rules and regulations, and
- 2. That air pollutant emissions by the source will be limited by



means of the best system of emission reduction which (taking into account the cost of achieving such reduction) has been adequately demonstrated.

## C. Action on applications

Within 60 days after receipt of a complete application for a permit to construct a new or modified source, the Board shall grant or deny the application. However, if a public hearing is held on an application, the Board shall grant or deny the application within 30 days after conclusion of the hearing. With the consent of the applicant, the 60-day period may be extended.

## D. Conditions on permit

The Board may impose any reasonable conditions upon a permit.

## E. Lapse and revocation of permit

- 1. Each permit to construct shall automatically lapse, one year after the date of its issuance, unless the construction (or modification) has then begun.
- 2. The Board may revoke a permit at any time if work is suspended for 1 year or is otherwise not diligently pursued to completion.

#### 3.1.2 Permit to operate

#### A. Permits required

- No person shall operate or cause the operation of a stationary source without applying to the Board for a permit to operate. Application for a permit to operate a new or modified source shall be made at least 30 days prior to start-up of operation. Application for a permit to operate an existing source shall be made on or before December 14, 1971.
- 2. No person shall operate or cause the operation of a source if the Board denies, suspends, or revokes a permit to operate.

#### B. Applications

Application for a permit to operate a new or modified source shall be made by the owner or operator thereof on forms furnished by the Board. Application for a permit to operate and existing source shall



comply with the requirements of paragraph 3.1.1 (A).

## C. Standards for granting permits

No permit to operate shall be granted unless the applicant shows to the satisfaction of the Board that the source is in compliance with applicable rules and regulations and, in the case of a new or modified source, also in compliance with the terms of a valid permit to construct.

## D. Performance testing

Before a permit to operate is granted, the applicant, if required by the Board, shall conduct performance tests in accordance with methods approved by the Board. Such tests shall be made at the expense of the applicant. The Board may monitor such tests and may also conduct performance tests.

## E. Action on applications

- 1. On an application for a permit to operate a new or modified source, the Board shall grant or deny the application within 60 days after receipt of the applicant's notice of start up. However, if a public hearing is held on an application, the Board shall act within 30 days after conclusion of the hearing. With the consent of the applicant, the 60-day period may be extended. On an application to operate an existing source, the Board shall act within a reasonable time.
- 2. Any permit granted to operate a source shall be valid for the period determined by the Board, but not exceed 5 years. At least 60 days before the expiration of a permit to operate, the owner or operator shall again file application for a permit to operate such source. The Board shall there after take action on such application, applying the rules and regulations applicable at the time of its action.

#### F. Conditions on permit

The Board may impose any reasonable conditions upon a permit.

## G. Suspension or revocation of permit

1. The Board may suspend or revoke a permit to operate for violation of applicable rules and regulations.



- Suspension or revocation of a permit to operate shall become final 10 days after service of notice on the holder of the permit, subject to the rights of public hearing and appeal as provided by law.
- 3. A permit to operate which has been revoked pursuant to these regulations shall be surrendered forthwith to the Board.

#### H. Transfer of permit

The holder of a permit may not transfer it without the prior written approval of the Board.

## 3.1.3. Exemptions

Neither a permit to consturct nor a permit to operate are required for:

- A. Vehicles, as defined in Law 141 of June 20, 1960 as amended; nor for air or maritime transports.
- B. The equipment described below:
  - Air conditioning and ventilation systems installed for comfort and not for the removal of general pollutants produced by, or escaping from, specific units, or items of equipment.
  - 2. Refrigeration units, except those used with, or in conjunction with, atmospheric pollution control equipment.
  - 3. Internal combustion engines having a piston displacement of less than twenty-two cubic inches.
  - 4. Operational equipment for laboratories which does not remove or carry pollutants from another source.
  - Water-cooling towers and pools except those used for cooling by evaporation of the waters of industrial processes or for the cooling by evaporation of the water of barometric spouts.
  - 6. Equipment utilized exclusively for steam cleaning.
  - 7. Automatic feed presses, and other types of presses which use only inks having a content of less than ten (10) percent of organic solvents, diluents, and thinners.
  - 8. Tanks, containers, and pumping equipment used exclusively for the storage or supply of:



- a. Sulfuric acid in a concentration of 99 per cent or less by weight.
- b. Phosphoric acid in a concentration of 99 per cent or less by weight.
- c. Nitric acid in a concentration of 70 per cent or less by weight.
- 9. Crucibles or hard coal ovens, or sets of these, used for melting metals, with a maximum cumulative capacity of 450 cubic inches.
- 10. Equipment utilized exclusively for wax melting or coating, and which does not use organic solvents, diluents, or thinners.
- C. The equipment described below, and the escape of collection systems used exclusively with said equipment.
  - 1. Equipment for cleaning by blasting which used abrasives in an aqueous suspension.
  - 2. Ovens and mixers of which the products are edible and for human consumption, and which work on gaseous fuels or electricity.
  - 3. Kilns used for ceramic products, and heated exclusively by gaseous fuels, electricity or any combination of these.
  - 4. Laboratory equipment used exclusively for chemical or physical analyses.
  - 5. Generators of artificial atmosphere utilized in conjunction with the processes of heat treatment of metals.
  - 6. Photo processing equipment by means of which an image is produced on sensitive material, or radiant energy.
  - 7. Equipment utilized for the surface conditioning, cleaning, or slicing of metals, using aqueous solutions.
  - 8. Equipment utilized for the washing or drying of products made of metal or glass, as long as no solid fuels or oil are burned.
  - House hold laundry dryers, extractors, or tumblers utilized for cleaning cloth, using aqueous solutions of bleaches or detergents.



- D. Steam generators, steam oven-heaters, and cauldrons heated only by gaseous fuels.
- E. Fans, chimneys or ventilators intended to provide natural ventilation.
- F. Containers, reservoirs, and tanks utilized exclusively for:
  - 1. Immersion operations for covering objects with oil, meat or fats, and where no organic solvents, diluents, or thinners are used.
  - 2. Immersion operations for covering with natural or synthetic resins which do not contain organic solvents.
  - 3. Storage without heating of organic materials having a boiling temperature of 300°F or more.
  - 4. Storage of lubricating oil.
  - 5. Etching
  - Storage of gasoline, diesel fuel, kerosene, acetone, alcohol, and similar organics, but only in underground tanks having a capacity of less than 10,000 gallons each.
- G. Vacuum cleaning systems used exclusively in the maintenance and cleaning of industrial, commercial or residential establishments.
- H. Structural changes which cannot alter the quality, nature, or quantity of pollutant emissions.
- I. Repairs or maintenance operations which do not involve structural changes in any equipment for which authorization is required.
- J. The identical substitution, in whole or in part, of any article, machine, equipment or other device for which prior approval has been granted in accordance with this article.

## 3.1.4. Continuing responsibility for compliance

Possession of a permit to contruct or a permit to operate shall not relieve any person of the responsibility to comply with applicable rules and regulations.

## 3.2 Compliance plans for existing sources

3.2.1. Individual compliance plans authorized



Any existing source not in compliance with applicable rules and regulations on their effective date shall be in compliance within 180 days of such date unless the owner or operator of the source shall have submitted a proposed compliance plan and applied to the Board for its approval, Nevertheless, in case of rules and regulations whose effective date is prior to July 1, 1972, any such existing source shall be in compliance by July 31, 1972 unless the owner or operator of the source shall have submitted a proposed compliance plan and applied to the Board for its approval.

#### 3.2.2. Pre-application conference

Before submitting a compliance plan for approval, the applicant or his authorized agent shall first confer in person with the Board or its staff.

#### 3.2.3. Notice of intention to submit compliance plan for major source

If a compliance plan pertains to a major source (as defined in article 1), the applicant shall cause to be published a notice of his intention to submit the plan for approval. Such notice shall be published, at the expense of the applicant, at least once in two of the newspaper of largest circulation on the island. The form of such notice shall be as prescribed by the Board. The notice shall inform the public that the Board may, in its discretion, hold a public hearing on the plan and shall request any information that may aid the Board in determining whether a hearing should be held.

#### 3.2.4. Application

- A. Each application for approval of a proposed compliance plan shall be signed by the owner or operator of the source.
- B. If the proposed plan pertains to a major source, the application shall be accompanied by suitable evidence of publication of the notice required by subsection 3.2.3.
- C. Each proposed plan shall fix a compliance date, on or before which compliance will be attained.
- D. Each proposed plan shall indicate the atmospheric pollution control equipment that will be installed, or other measures that will be taken, to attain compliance by that date.
- E. Each proposed plan shall establish a schedule for the completion of engineering, procurement, fabrication, installation, and adjustment of any atmospheric pollution control equipment required to carry out the plan.



F. Each proposed plan shall include provision for periodic reports, at least semiannually, to demonstrate continuing compliance with the terms of the plan.

## 3.2.5. Standards for granting approval of compliance plan

No compliance plan shall be approved unless the applicant shows to the satisfaction of the Board:

- A. That the plan provides for compliance as expeditiously as practicable.
- B. That the source will be in compliance with all applicable rules and regulations on or before the clean air date(s) for national primary and secondary ambient air quality standards (as defined in article 1).
- C. If the plan fixes any compliance date more than 18 months after the date of plan approval, that the plan provides for periodic increments of progress.
- D. That the plan provides for periodic reports to the Board to demonstrate continuing compliance with the terms of the plan.

## 3.2.6. Action on compliance plan

- A. The Board shall act on each proposed compliance plan within a reasonable time.
  - B. Any plan approved by the Board shall be deemed to authorize operation of the source, in compliance with the terms of the plan, until the compliance date fixed by the plan. At least 60 days before that compliance date, the owner or operator shall file appliaction for a permit to operate, and the Board shall act thereon as provided in subsection 3.1.2. of this Regulation.
  - C. No person shall operate or cause the operation of a source if the Board disapproves, or suspends or revokes its approval of, a compliance plan submitted for that source.

#### 3.2.7. Conditions of plan approval

The Board may impose any reasonable conditions upon its approval of a compliance plan.

3.2.8 Revocation of approval of compliance plan



- A. The Board may suspend or revoke its approval of a compliance plan for failure to comply with any of the terms of the plan.
- B. Suspension or revocation of approval of a compliance plan shall become final 10 days after service of notice on the owner or operator of the source, subject to the rights of public hearing and appeal as provided by law.

## 3.3. Location Approval for major sources

After January 1, 1973, the Board shall not grant a permit to construct a major source (as defined in article 1) at any site except pursuant to a valid Location Approval, pertaining to that site. The Board may grant such Location Approval only in accordance with this section.

## 3.3.2 Application for Location Approval

- A. An application for Location Approval shall include a draft Environmental Impact Statement, which shall satisfy the requirements of section 4 (2)(C) of the Pulbic Policy Environmental Act and of implementing Guidelines issued by the Board. Such Statement shall include consideration of alternative locations for the proposed construction.
- B. A Commonwealth agency or public corporation may include, in a single application, one or more sites that the agency or corporation owns or is considering the possibility of acquiring, for inclusion in an Inventory of Approval Sites for Major Sources. Such an application need not designate each site for use by a specific type of industry or other source.
- C. Except as permitted by the preceding paragraph, each application shall pertain to only one site and shall specify the type of industry or other source to be constructed on the site. All applications shall include any additional information deemed necessary for consideration of the case.
- D. Unless required by the Board in a specific case, an application for Location Approval need not be accompanied by an application for a permit to construct the proposed source.

## 3.3.3 Standards for granting Location Approval

Location Approval shall not be granted unless all the following requirements are satisfied:

A. The applicant must show, to the satisfaction of the Board, that the proposed location is at least as favorable, from the standpoint of environ-



mental impact, as any suitable alternative location for the proposed source. In determining environmental impact, the Board shall consider the proximity of population concentrations, topography, microclimate vegetation, and any other factors which the Board deems relevant. In determining the suitability of alternative locations, the Board shall not limit its consideration to environmental matter but shall consider the full range or economic, technical, and other factors relevant to source location. Due weight shall be given to any available plans and planning studies.

- B. The Board must impose both of the following conditions on every Location Approval:
  - 1. The proposed source must comply with all applicable rules and regulations and other standards, and
  - Air pollutant emissions from the source must be limited by means
    of the best system of emission reduction which (taking into
    account the cost of achieving such reduction) has been adequately
    demonstrated.

## 3.3.4 Action on application

- A. Location Approval shall not be granted without notice and hearing, which shall comply with subsection 3.6.3.
- B. Location Approval shall not be granted without prior issuance of a final Environmental Impact Statement, which shall satisfy the requirements of section 4(2)(C) of the Public Policy Environmental Act and of implementing Guidelines issued by the Board.

## 3.3.5 Conditions on approval

In addition to the conditions required by subsection 3.3.3, which must be imposed in every case, the Board may impose any reasonable conditions upon its grant of Location Approval.

## 3.3.6 Period of validity

- A. When the Board grants Location Approval, it shall determine the period, not to exceed 5 years, during which such Approval is to remain valid. Such Approval shall not authorize the granting of any construction permit unless an application for such permit is filed within that period.
- B. If an applicant who has obtained Location Approval shall at any time file written renunciation of that Approval, the Board shall not thereafter grant any construction permit pursuant to that Approval.



#### 3.4 Dispensations

## 3.4.1 Dispensations authorized

The Board may grant dispensations from the strict application of the substantive requirements established by this Regulation, but only in accordance with this section.

## 3.4.2 Pre-application conference

Before filing an application for a dispensation, the applicant or his authorized agent shall first confer in person with the Board or its staff.

## 3.4.3 Application

- A. Each application for a dispensation shall include the following:
  - 1. If the proposed dispensation pertains to a new or modified source, the application for dispensation shall include an application for a permit to construct the proposed source.
  - If the proposed dispensation pertains to an existing source, the application for dispensation shall include (1) an application for a permit to operate the source and (2) an application for approval of a proposed compliance plan as described in section 3.2.
- B. The application shall specify each regulatory provision from which the dispensation would grant relief and shall specify the nature and extent of such relief.

#### 3.4.4 Standards for granting dispensations

No dispensation shall be granted unless the applicant shows all of the following to the satisfaction of the Board:

- A. The dispensation will not cause significant adverse impact on the quality of the environment.
- B. Special circumstances justify the grant of the dispensation in this case even though the strict terms of the Regulation should be applied to other applicants.
- C. The dispensation will not prevent or interfere with attainment or maintenance of a national ambient air quality standard after the clean air date (as defined in article 1).



## 3.4.5 Action on application

- A. No dispensation shall be granted without notice and hearing, which shall comply with subsection 3.6.3.
- B. The Board shall notify the applicant in writing of its grant or denial of a dispensation. In its notice, the Board shall set forth the reasons for its action, including its reasons for determining that the standards in subsection 3.4.4 were or were not satisfied, as the case may be.

## 3.4.6 Conditions on grant

The Board may impose any reasonable conditions upon its grant of a dispensation.

#### 3.4.7 Period of validity

A dispensation shall be valid for the period determined by the Board, but not to exceed 5 years. To seek renewal or extension of a dispensation, the owner or operator of the source shall, at least 120 days before its expiration, file application for a new dispensation. The Board shall thereafter take action on such application, applying the rules and regulations applicable at the time of its action.

#### 3.5 Revision of applicable rules and regulations

## 3.5.1 Effectiveness of revisions

- A. Amendments to this Regulation may be adopted by the Board and shall become effective 30 days after the date of their filing in the Department of State in conformity with Law No. 112 of June 30, 1957, as amended.
- B. Revisions of Federal emission limitations (including "Performance standards for new stationery sources" and "national emission standards for hazardous air pollutants") and of Federal ambient air quality standards (including "national primary and secondary ambient air quality standards") shall become effective as part of applicable rules and regulations immediately upon their promulgation by the Administrator of the U.S. Environmental Protection Agency pursuant to the Clean Air Act as amended.

#### 3.5.2 Notice and hearing on amendments to this Regulation

The Board shall not adopt any amendment to this Regulation without notice



and hearing, which shall comply with subsection 3.6.3. Each required notice of hearing shall indicate at least one location at which the full text of the proposed amendment is available for public inspection.

## 3.5.3 Effect of pending revision

- A. Notwithstanding any other provision of this regulation, while any proposed revision of applicable rules and regulations is pending, the Board shall not grant any permit or approve any compliance plan that could not be granted or approved if such proposed revision were already in effect.
- B. For purposes of this section, an amendment to this Regulation is "pending":
  - From the date of the first publication of notice of public hearing on the amendment,
  - Until 120 days after the close of such hearing, or until the effective date of the amendment, or until the date of final Board action rejecting or withdrawing the amendment, whichever first occurs.
- C. For purposes of this section, a revision of Federal emission limits or ambient air quality standards is "pending":
  - 1. From the date of first publication of the draft revision in the Federal Register,
  - 2. Until 120 days after such date, or until promulgation or withdrawal of the revision, whichever first occurs.

## 3.5.4 Effect on outstanding permits, plans, dispensations

Revision of applicable rules and regulations shall not impair the validity of any permit, compliance plan, Location Approval, or dispensation lawfully granted or approved before the effective date of such revision. The Board may, however, revoke any such permit, plan, Location Approval, or dispensation, or may impose additional conditions thereon, when the Board finds such action necessary to attain timely compliance with any new or revised national ambient air quality standard.

#### 3.6 Applications, hearings, notice

#### 3.6.1 Applications



## A. Content of applications

The content of applications must comply with the policies and rules of the Board. All applications must be upon forms furnished by the Board and must include all information, plans, specifications, evidence, or documentation deemed necessary by the Board for consideration of the case.

#### B. Oath

Each application shall be submitted together with a sworn statement or affidavit of the applicant or his authorized agent attesting to the truth and correctness of all facts, statements, and information presented.

## C. Single source

Except as otherwise specifically permitted, each application shall pertain to only one source.

## 3.6.2 Optional hearings

The Board may at its option hold one or more public hearings on any pending action, giving written notice to the applicant and such additional notice thereof as the Board may deem appropriate in each case.

#### 3.6.3 Notice of required hearings

Notice of the date, time, place, and nature of each public hearing required by this Regulation must be given, at least 30 days before the hearing, by:

- A. Publishing the required notice at least once in two of the newspapers of largest circulation on the island; and
- B. Mailing the required notice to the applicant.

Additional notice may be given in any manner the Board deems appropriate.

#### 3.6.4 Decision and notification

The Board shall notify the applicant in writting of its approval or disapproval of each application filed pursuant to this Regulation. The Board shall set forth in any notice of disapproval its reasons for disapproval.

#### 3.7 Punishment

Any violation of this Regulation will constitute a misdemeanor, and will be



subject to the penalty established by the Public Policy Environmental Act. Moreover, the Board may, in any case of infraction of any of the applicable rules and regulations suspend, amend, or revoke any relevant permit, approval, dispensation, or other authorization issued under this Regulation.

## 3.8 Mandatory periodic hearings on regulation

The Board shall periodically hold public hearings to consider possible improvement of this Regulation (including the emission limits established by it). The first such hearings shall be held no later than August 15, 1975 and each subsequent hearing shall be held no later than 3 years after the close of the preceding one. The Board may, but need not, propose amendments to this regulation for consideration at any such hearing. Any such hearing may, but need not, be held simultaneously with a hearing required by subsection 6.1.6. Notice of each hearing shall be given in accordance with subsection 3.6.3.



#### **ARTICLE 4 - OPEN BURNING**

## 4.1 Previous authorization required

- A. No person shall cause or permit the open burning of any material unless previous authorization is obtained from the Board.
- B. Previous authorization will not be required when open burning results from activities in connection with any of the following practices:
  - 1. Fire control
  - 2. The melting of lead, tar or other materials to be used in repair or construction work.
  - 3. Campfires and other fires used solely for recreational purposes, for ceremonial occasions, or for outdoor preparation of food.
  - 4. Training for fire fighting.
- C. All requests for such authorization shall include the following information:
  - The reasons why open burning should be authorized and a statement as to the nature and total amount of material to be burned.
  - 2. The date, time and exact location of the open burning. Open burning will not be authorized at any location which is less than 100 feet from the boundary of any property or public road.
  - 3. A certification from the Puerto Rico Fire Department that the proposed open burning will be in accordance with the regulations of that department.
  - 4. A certification from the Puerto Rico Department of Health that the proposed open burning will be in accordance with health regulations.

## 4.2 Open burning plans as authorization

An open burning plan, if approved by the Board, shall constitute authorization for open burning in accordance with the plan. Any agricultural, industrial, commerical, or governmental entity may request Board approval of such a plan. The Board may grant approval only if:



- A. The applicant demonstrates to the satisfaction of the Board that the planned open burning is customary and that there is no practicable alternative.
- B. The applicant's request for authorization satisfies the requirements of section 4.1, except that subparagraph 4.1(C)(2) shall not apply.
- C. The request describes the nature of the proposed burning and provides any additional information deemed necessary by the Board for consideration of the case.

## 4.3 Hazardous or objectionable open burning

Nothing in this article shall be construed to permit open burning which causes objectionable odors or constitutes a hazard to vehicular or air traffic nor which violates any other law or applicable regulation.

## 4.4 Certain open burning prohibited

The open burning of chemical wastes or reagents, or burning for material recovery or reclaiming will not be permitted.

## 4.5 Flares for safety or pollution control

This article shall not apply to flares used for safety or as pollution control equipment, but such use must comply with other applicable rules and regulations.



## ARTICLE 5 - CONTROL OF PARTICULATE EMISSIONS

#### 5.1 Visible emissions

- 5.1.1 Visible emission restrictions for stationary sources.
  - A. No person shall cuase or permit the emission of visible air pollutants of a shade or density equal to or darker than that designated as No. 1 on the Ringelmann chart or 20 per cent opacity.
  - B. Nevertheless, a person may discharge into the atmosphere from any single source of emission, for a period or periods aggregating not more than 4 minutes in any 30 minutes, air pollutants of a shade or density not darker than No. 3 on the Ringelmann chart or 60 per cent opacity.

#### 5.1.2 Visible emission restrictions for motor vehicles

- A. No person shall cause or permit the emission of visible air pollutants from gasoline-powered motor vehicles for longer than 5 consecutive seconds.
- B. No person shall cause or permit the emission of visible air pollutants from diesel-powered motor vehicles of a shade or density equal to or darker than that designated as No. 1 on the Ringelmann chart or 20 per cent opacity for longer than 5 consecutive seconds.

## 5.2 Fugitive dust

- 5.2.1 No person shall cause or permit any materials to be handled, transported, or stored; or a building, its appurtenances, or a road to be used, constructed, altered, repaired or demolished without taking reasonable precautions to prevent particulate matter from becoming airborne. Such reasonable precautions shall include, but not be limited to, the following:
  - A. Use, where possible, or water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, quarrying operations, the grading of roads, or the clearing of land;
  - B. Application of asphalt, oil, water, or suitable chemicals on dirt roads, materials stockpiles, and other surfaces which can give rise to airborne dusts;
  - C. Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty materials. Adequate containment methods shall be employed during sandblasting or other similar operations;



- D. Covering, at all times when in motion, open bodied trucks transporting materials likely to give rise to airborne dusts;
- E. Conduct of agricultural practices such as tilling of land and application of fertilizers, in such manner as to prevent dust from becoming airborne;
- F. The paving of roadways and their maintenance in a clean condition;
- G. The prompt removal of earth or other material from paved streets onto which earth or other material has been transported by trucking or earth moving equipment, erosion by water, or other means.
- 5 2.2 No person shall cause or permit the discharge of visible emissions of fugitive dust beyond the lot line of the property on which the emissions originate.
- 5 2.3 When air pollutants escape from a building or equipment in such a manner and amount as to cause a nuisance or violate any regulations, the Board may order that the building or equipment in which processing, handling, and storage are done be tightly closed and ventilated in such a way that all emissions from the building or equipment are treated to remove or destroy such air pollutants before emission to the open air.
- 5.2.4 Every area, lot, or part of a piece of land, intended for parking with a capacity for accomodating more than 40 vehicles at the same time must be paved with concrete, asphalt, or equivalent hard surface, on all its road and parking areas.

#### 5.3 Incineration

- 5.3.1 No person shall cause or permit the emission from any incinerator of particulate matter to exceed 0.20 pounds per 100 pounds (2 gm/kg.) of refuse charged. Provided that for an incinerator having capacity of less than 50 tons per day (24-hours), emission shall not exceed 0.40 pounds per 100 pounds (4 gm/kg.) of refuse charged.
- 5.3.2 Emission tests shall be conducted at maximum burning capacity of the incinerator.
- 5.3.3 The burning capacity of an incinerator shall be the manufacturer's or designer's guaranteed maximum rate or such other rate as may be determined by the Board in accordance with good engineering practices. In cases of conflict, the determination made by the Board shall govern.
- 5.3.4 For the purposes of subsection 5.3.1, the total of the capacities of all incinerators within one system shall be considered as the incinerator capacity.



5.3.5 All incinerators that burn solid refuse shall be of the multiple chamber type or, at the discretion of the Board, of equipment pollution control efficiency.

## 5.4 Fuel burning equipment

- 5.4.1 No person shall cause or permit the emission, from fuel burning equipment burning solid fuel, of particulate matter in excess of 0.30 pounds per million B.t.u. (0.54 gm/10<sup>6</sup> gm-cal) of heat input.
- 5.4.2 For purposes of this regulation, the heat input shall be the aggregate heat content of all fuels whose product of combustion pass through a stack or stacks. The heat input value used shall be the equipment manufacturer's or designer's guaranteed maximum input, whichever is greater. The total heat input of all fuel burning units on a plant or premises shall be used for determining the maximum allowable amount of particulate matter which may be emitted.

## 5.5 Process industries - general

5.5.1 Except as permitted by subsection 5.5.7, no person shall cause or permit the emission of particulate matter in any one hour from any process source in excess of the amount shown in the following table for the process weight rate allocated to such source.



Process	Emission
veight rate	rate
(lbs./hr.)	(lbs./hr.)
50	0.36
100	
500	
1,000	2.25
5,000	6.34
10,000	9.73
20,000	16.00
60,000	
80,000	42.00
120,000	
160,000	
200,000	
400,000	
1,000,000	
2,000,000	
2 202 202	00.00
h uuu ouu	9.3 UU



- 5.5.2 Interpolation of the data in the above table shall be done by the use of proportional interpolation.
- 5.5.3 Process weight rate is the total weight of all materials introduced into any specific process in any one hour that may cause any emission of particulate matter. Solid fuels charged will be considered as part of the process weight, but liquid and gaseous fuels and combustion air will not. For a cyclical or batch operation, the process weight per hour will be derived by dividing the total process weight by the number of hours in one complete operation from the beginning of any given process to the completion thereof, excluding any time during which the equipment is idle. For a continuous operation, the process weight per hour will be derived by dividing the process weight for a typical period of time.
- 5.5.4 Where the nature of any process or operation or the design of any equipment is such as to permit more than one interpretation of this regulation, the interpretation that results in the smallest allowable emission shall apply.
- 5.5.5 For purposes of the regulation, the total process weight rate from all similar process units at a plant or premises shall be used for determining the maximum allowable emission of particulate matter that passes through a stack or stacks.
- 5.5.6 From any source other than a process source, no person shall cause or permit the emission of particulate matter in any one hour in excess of 0.02 pound per pound of process weight (as described in subsection 5.5.3).
- 5.5.7 Nothing in this section 5.5 shall be deemed to prohibit the construction or operation of a source if its owner or operator demonstrates all of the following to the satisfaction of the Board:
  - A. That air pollutant emissions from such source are limited by means of the best system of emission reduction which (taking into account the cost of achieving such reduction) has been adequately demonstrated, and
  - B. That, despite the operation of such system at its rated efficiency, the source cannot practicably comply with subsection 5.5.1, and
  - C. That emissions of particulate matter from such source do not, in any one hour, exceed 0.02 pound for each pound of process weight (as described in subsection 5.5.3).



## ARTICLE 6 - CONTROL OF SULFUR COMPOUND EMISSIONS

#### 6.1 Fuel combustion

#### 6.1.1 Sulfur content in fuel

Except as authorized by subsections 6.1.4, 6.1.5 and 6.1.6., no person shall burn, nor shall any person sell or otherwise make available for burning in fuel burning equipment, any fuel containing in excess of the following percentages of sulfur by weight:

A. After October 1, 1973:

2.0 per cent sulfur

B. After April 1, 1974:

1.5 per cent sulfur

C. After April 1, 1975:

1.0. per cent sulfur

## 6.1.2 Critical SO2 source areas

After April 1, 1975, in the municipalities of San Juan, Cataño, Guaynabo, and Bayamón, no person shall, except as authorized by subsections 6.1.4, 6.1.5, and 6.1.6, burn any fuel containing in excess of 0.5 per cent sulfur by weight.

#### 6.1.3 Effective dates

Notwithstanding subsection 3.2.1, all stationary sources shall be in compliance with subsections 6.1.1 and 6.1.2 at all times on and after the effective dates specified in those subsections.

#### 6.1.4 Equivalent emission authorized

Nevertheless, the Board may authorize the burning, sale, or otherwise making available of fuel with higher sulfur content if an applicant demonstrates to its satisfaction that:

- An industrial process, or atmospheric pollution control equipment, or both combined, will result in the removal of sulfur compounds from combustion gases emitted by a source, and
- B. As a result of such removal, sulfur compound emissions from that source will not exceed those that would result if the fuel required by subsections 6.1.1 and 6.1.2 were burned without such removal.

Such authorization shall be granted only by means of a permit or compliance plan that specifies the maximum percentages of sulfur in the authorized fuel.



## 6.1.5 Ship bunkering

Subsections 6.1.2 shall not apply to ship bunkering.

## 6.1.6 Review of sub-sections 6.1.1 and 6.1.2

- A. The Board shall undertake a continuing program of air quality surveillance in order to obtain accurate measurements of ambient air quality in Puerto Rico.
- B. On or before June 30, 1973, December 31, 1973, June 30, 1974, and June 30 of each succeeding year, the Board shall:
  - 1. Publicly release accurate measurements and estimates of ambient air quality in Puerto Rico.
  - 2. Publicly release a tentative determination that ambient air quality in Puerto Rico is or is not, as the case may be, in compliance with national ambient air quality standards.
  - 3. Publicly release a tentative determination, on the basis of the most reliable data then available, whether subsections 6.1.1 and 6.1.2 are, in whole or in part, either more restrictive or less restrictive than is necessary to achieve and maintain compliance with national ambient air quality standards.
  - 4. Give public notice of a public hearing to be held no later than 35 days after such notice, to consider the tentative determinations listed in subparagraphs (2) and (3) above, together with any other matters the Board may deem appropriate. Such notice shall comply with subsection 3.6.3.
- C. Such public hearing shall thereafter be held. Within 30 days after the conclusion of such hearing, the Board shall make and publicly announce its determination with respect to each of the matters described in subparagraphs (2) and (3) of paragraph (B) above. Provided that if the concentrations of SO<sub>2</sub> are found to be within the national ambient air quality standards, the Board shall so announce and may amend subsections 6.1.1 and 6.1.2, as necessary to maintain those standards.
- 6.1.7 No person shall cause or permit the flaring or combustion of any refinery process gas stream or any other process gas stream that contains sulfur compounds measured as hydrogen sulfide in concentrations greater than 10 grains per 100 standard cubic feet (23 gm/100 scm) of gas. This subsection shall not prohibit emergency releases, necessary for safety, and which are reported to the Board in the manner described in subsection 2.5.2.



#### 6.2 Sulfuric acid plants

No person shall cause or permit sulfur dioxide emissions which exceed 6.5 pounds per ton (3.25 kg/metric ton) of 100 per cent acid produced.

## 6.3 Sulfur recovery plants

No person shall cause or permit the emission of sulfur oxides, calculated as sulfur dioxide, from a sulfur recovery plant to exceed 0.10 pounds (kg.) per pound (kg.) of sulfur processed.

#### 6.4 Nonferrous smelters

No person shall cause or permit the emission of sulfur oxides, calculated as sulfur dioxide, from primary nonferrous smelters to exceed that set forth according to the following equations:

Copper smelters: Y = 0.1XZinc smelters:  $Y = 0.564 \times 0.85$ 

Lead smelters:  $Y = 0.98 \times 0.77$ 

Where X is the total sulfur fed to the smelter in lb./hr. and Y is the allowable sulfur dioxide emissions in lb/hr.

## 6.5 Sulfite pulp mills

No person shall cause or permit the total sulfite pulp mill emissions of sulfur oxides, calculated as sulfur dioxide, from blow pits, washer vents, storage tanks, digester relief, recovery system, etc., to exceed 9.0 pounds per air-dried ton (4.5 kg./metric ton) of pulp produced.



#### ARTICLE 7 - CONTROL OF ORGANIC COMPOUNDS EMISSIONS

## 7.1 Storage of volatile organic compounds

- 7.1.1 No person shall place, store, or hold in any stationary tank, reservoir, or other container of more than 40,000 gallons (151,412 liters) capacity any volatile organic compounds unelss such tank, reservoir, or other container is a pressure tank capable of maintaining working pressures sufficient, under normal operating conditions, to prevent vapor or gas loss to the atmosphere or is designed, and equipped, with one of the following vapor loss control devices:
  - A. A floating roof, consisting of a pontoon type, double deck type roof or internal floating cover, which will rest on the surface of the liquid contents and be equipped with a closure seal or seals to close the space between the roof edge and tank wall. This control equipment shall not be permitted if the volatile organic compounds have a vapor pressure of 11.0 pounds per square inch absolute (568 mm Hg.) or greater under actual storage conditions. All tank gauging or sampling devices shall be gas-tight except when tank gauging or sampling is taking place.
  - B. A vapor recovery system, consisting of a vapor gathering system capable of collecting the volatile organic compounds, vapors and gases discharged, and a vapor disposal system capable of processing such volatile organic vapors and gases so as to prevent their emission to the atmosphere and with all tank gauging and sampling devices gas-tight except when gauging or sampling is taking place.
  - C. Other equipment or means of equally acceptable efficiency for purposes of air pollution control as may be approved by the Board.

### 7.2 Waste gas disposal

No person shall cause or permit the emission of more than 15 pounds (6.8 kg.) per day of waste gas from any ethylene producing plant or other ethylene emission source unless the waste gas stream is properly burned at 1300°F (704°C) for 0.3 second or greater in a direct-flame afterburner, or burned in a smokeless flare or an equally effective device as approved by the Board. This provision shall not apply to emergency reliefs and vapor blowdown systems.

## 7.3 Organic solvents

7.3.1 No person shall cause or permit the emission of more than 3 pounds (1.36 kg.) of organic solvents in any one hour, nor more than 15 pounds (6.8 kg.) in any one day, from any article, machine, equipment, or other contrivance unless such article, machine, equipment, or other contrivance is provided with an acceptable ventilation and control system approved by the Board.



- 7.3.2 Any series of articles, machines, equipment or other contrivances designed for processing a continuously moving sheet, web, strip, or wire which is subjected to any combination of operations shall be collectively subject to compliance with subsection 7.3.1.
- 7.3.3 Emission of organic solvents from the cleanup with organic solvents shall be included with the other emissions of organic materials from that article, machine, equipment, or other contrivance for determining compliance with this rule.

## 7.3.4 This section 7.3 shall not apply to:

- A. The manufacture of organic solvents.
- B. The use of equipment for which other requirements are specified by sections 7.1 or 7.2, or which are exempt from air pollution control requirements by said sections.
- C. The spraying or other employment of insecticides, pesticides, or herbicides.
- D. Industrial surface coating operations when the coating's solvent make-up is water-based and does not exceed 20 per cent of organic materials, by volume.

## 7.4 Volatile organic compounds and organic solvents defined

A volatile organic compound is any compound containing carbon and hydrogen or carbon and hydrogen in combination with any other element and which has a vapor pressure of at least 1.5 pounds per square inch absolute (76 mm. Hg) under actual storage conditions. Organic solvents include diluents and thinners and are defined as chemical compounds of carbon which are liquids at standard conditions and which are used as dissolvers, viscosity reducers, or cleaning agents.



## ARTICLE 8 - ODORS IN THE ATMOSPHERE

- 8.1 No person shall cause or permit emission to the atmosphere of matter which produces an "objectionable" odor that can be perceived on land other than that designated for industrial purposes.
- 8.2 No person shall cause or permit an emission which produces an odor perceivable on land zoned for industrial purposes if the odor is determined "objectionable" when one given volume of the air containing such matter, collected at or beyond a lot line of the source, is diluted with five (5) volumes of odorless air.
- 8.3 The odors emanating from the following shall not be considered in violation of this Regulation: (1) trees, bushes, plants, flowers, grass, (2) domestic gardening and agriculture processes, such as the use of fertilizers (except sugar cane waste and manure).
- 8.4 For the purpose of this article, an odor shall be considered "objectionable" when 60 per cent or more of a group of at least five individuals consider the odor objectionable when exposed to it at a place chosen with the approval of the Board. These five individuals shall be selected by the Board.
- 8.5 Odor concentrations shall be measured in accordance with the American Society for Testing and Materials Standard D1391-57 "Standard Method for Measurement of Odor in Atmospheres (Dilution Method)" or its equivalent.



#### **ARTICLE 9 - ADDITIONAL PROVISIONS**

## 9.1 Public nuisance

- A. Nothing in this Regulation shall be construed to authorize or legalize the creation or maintenance of a public nuisance as defined in Article 329 of the Penal Code of Puerto Rico.
- B. This section shall not be understood as a limit or restriction of the other prohibitions established in other parts of this Regulation.

## 9.2 Overlapping or contradictory provisions

If a requirement established by any provision of this Regulation is either more restrictive or less restrictive than a requirement established by any other provision of this Regulation or by any other law, regulation, standard, or limit established by any duly constituted governmental authority having jurisdiction, the requirement which is more restrictive shall govern. Except that nothing in this section shall be deemed to apply to the requirements expressed in subsections 6.1.1 through 6.1.6 for existing sources.

#### 9.3 Derogation

This Regulation nullifies any previous provision, resolution, agreement, or regulation of the same subject which may contradict this Regulation. Moreover, this Regulation amends, in its entirety the Regulation for the Control of Atmospheric Pollution, as adopted by the Board on June 29, 1971, and replaces it in all its parts.

#### 9.4 Separability clause

If any provision of this Regulation is declared illegal or unconstitutional by sentence of a court, such declaration or sentence will not affect the other provisions of this Regulation, each one being considered as separate.

#### 9.5 Effectiveness

This regulation shall go into effect thirty (30) days after the date of its filing at the Department of State, in conformity with Law 112 of June 30, 1957, as amended.



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Se terminó de imprimir en julio de 1972 en los talleres gráficos de la Junta de Calidad Ambiental, San Juan de Puerto Rico.

Segunda tirada ..... setiembre de 1972

RG - ai - 01-72

